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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,776	11/21/2003	Klaus-Jurgen Feilkas	P2001,0382	1527

24131 7590 05/20/2004

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EXAMINER	
CHANG, JOSEPH	

ART UNIT	PAPER NUMBER
2817	

DATE MAILED: 05/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/718,776	FEILKAS ET AL.	
	Examiner	Art Unit	
	Joseph Chang	2817	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondenc address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 November 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,7 and 8* is/are rejected.

7)☒ Claim(s) *5 and 6* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *11/21/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: OSCILLATOR CIRCUIT WITH SWICHABLE COMPENSATED AMPLIFIERS.

Claim Objections

Claims 1 and 3 are objected to because of the following informalities:

Regarding Claim 1, it appeared that the phrase "switches, in each case one of said switches being coupled with in each case one of said attenuation compensation amplifiers" would be more clear if it read as "switches, each being coupled with one of said attenuation compensation amplifiers" since the phase "in each case" is confusing as to what it is referring. Note: for examination purposes, the above-mentioned phrase is interpreted as "switches, each being coupled with one of said attenuation compensation amplifiers".

Regarding Claim 3, the recitation "amplitude value detection" lacks an antecedent basis, and therefor, it should be changed to -- amplitude value detector --.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 7 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Rogers (US 2003/0025566 A1).

Regarding Claim 1, Rogers discloses in figure 3 a compensated oscillator circuit, comprising:

a supply potential connection (Vcc);

a resonant circuit (LC tank: L, Vvar1, Cvar2);

at least two attenuation compensation amplifiers (Q1, Q2) coupled switchably (through switches Qt1-Qt6) to the resonant circuit to compensate for attenuation;

switches (Qt1-Qt6, Para.[0036]), each being coupled with one of said attenuation compensation amplifiers (Q1, Q2) for forming switchable current paths (Vcc, D, N1 (or N2), Q1 (or Q2), Rt1-6, Qt1-6) between said resonant circuit (L, Vvar1, Cvar2) and said supply potential connection (Vcc);

and currents sources (VCO tail resistors Rt1-Rt6) connected to and feeding said attenuation compensation amplifiers (Q1, Q2), one of said current sources (Rt16) disposed in each of said switchable current paths (Vcc, D, N1 Q1, Rt16, Qt16).

Regarding Claim 2, Rogers discloses a drive circuit (36), and the switches (Qt1-Qt6) each has a control connection (base of transistor Qt1-Qt6 and B1-B6 of 36) connected to the drive circuit (36).

Regarding Claim 3, Rogers discloses a amplitude value detector (32) for forming a control loop (Oscillator output (N1,N2), 32, 36, to Qt1-Qt6), the amplitude value detector having an input connected to the resonant circuit (N1, N2) and an output connected to the drive circuit (36).

Regarding Claim 4, Rogers discloses the switchable current paths with the attenuation compensation amplifiers are connected in parallel with one another to the resonant circuit (Q1 and Q2 are connected in parallel to the LC tank circuit).

Regarding Claim 7, Rogers discloses the switches (Qt1 - Qt6) are digitally (control bit B1 - B6) driven transistor switches.

Regarding Claim 8, Rogers discloses the resonant circuit has a control input (Vcont) for controlling a resonant frequency using a control voltage (page 3, Para. [0029], lines 5-7).

It is noted that Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Allowable Subject Matter

Claims 5 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the best prior art of record, Rogers, taken alone or in combination of other references, does not teach or fairly suggest attenuation compensation amplifiers each have two cross-coupled transistors.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Fujii et al. discloses a piezoelectric oscillator having a plurality of delay times.

Gilbert discloses an LC oscillator with an automatic biasing scheme.

Tsukagoshi et al. discloses in figure 5 a piezoelectric oscillator having a current limiting with switches.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Chang whose telephone number is 571 272-1759. The examiner can normally be reached on Mon-Fri 0700-1730.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (571) 272-1769. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Joseph Chang
Patent Examiner
Art Unit 2817

JC